

FRANKE & HEIDECKE

B R A U N S C H W E I G

Rolleiflex Rolleicord

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Rolleiflex



I N P R A C T I C A L U S E

Please do not read

the entire booklet at one time. As a beginning,
the first four pages
will suffice!

This short introduction will tell you in rapid fashion all you need to know when you take the camera in hand for the first time. At the same time it is an outline of the contents of the pages which follow. You will find a complete, illustrated description of the Rolleiflex T in use, also the necessary technical explanations and tables which will be so handy to you later on.

The electric exposure meter and mask set "16" are important accessories for the Rolleiflex T. Accordingly, they are also dealt with in this booklet. The Practical Accessories booklet gives detailed information on the many special Rollei accessories.

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Shortened Instructions

Complete
on page:

Loading the Camera:

- 9 Unlatch back ① and open.
Remove the new-camera-seal ribbon.
- 9 Pull out the film spool retainer knob ② and insert the film.
Slip the leading edge of the film protective paper into the long slot of the empty spool.
- 10 Wind the film until the starting marks are opposite the red dots ③ - Stop!
- 10 Close the back and latch.
- 10 Film counter on No. 1: Wind crank until it stops and then back to stop. The shutter is now automatically cocked, the camera ready for shooting.
- 11 After each shot: Wind crank as before; forward to stop, back to stop.

for Quick Reading

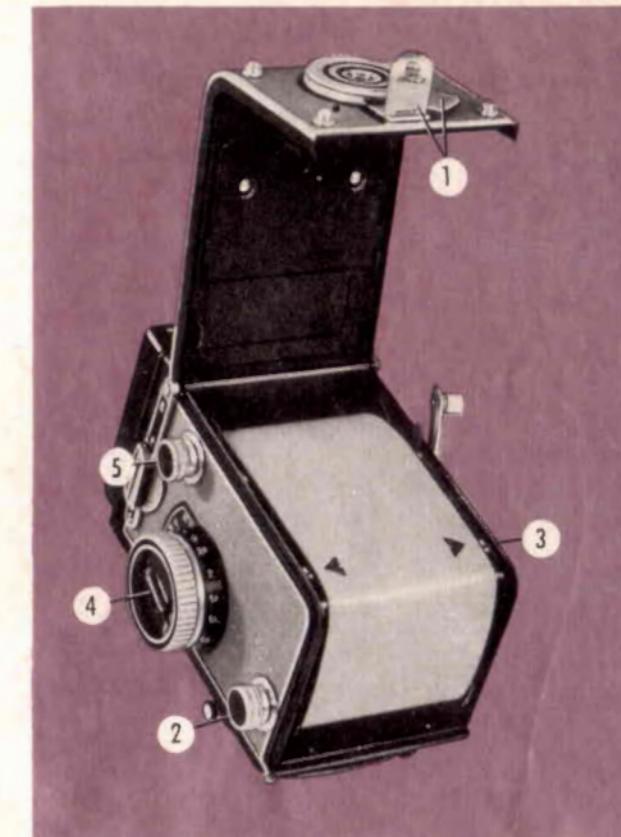
Complete
on page:

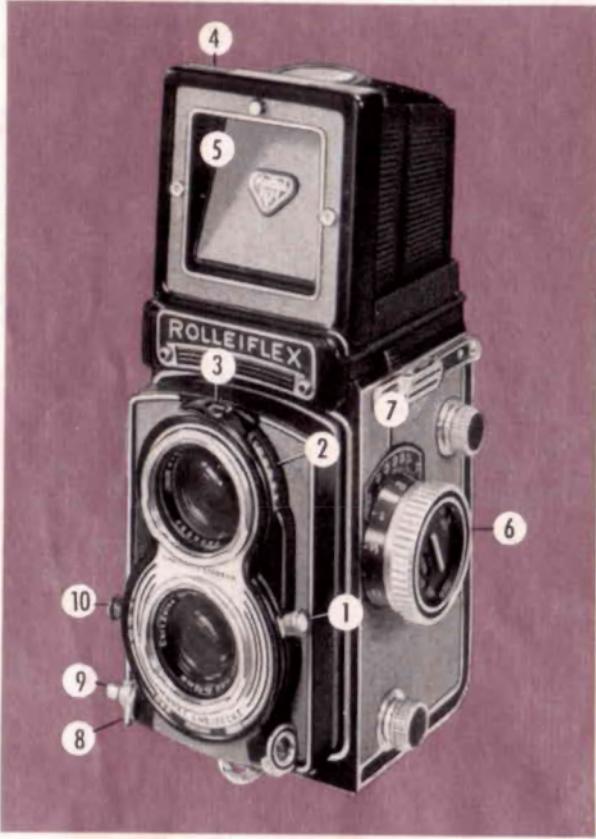
Immediately after Loading:

- 10 Set film reminder to DIN/ASA speed rating (31) by turning bar of film reminder dial to the right ④. Set the film type (ortho, pan, indoor or outdoor color) by turning to the left.

Unloading the Camera:

- 11 Roll the exposed film up by turning crank four complete rotations (⑤ in film counter window).
- 11 Unlatch back and open.
- 11 Pull out the film spool knob ⑤, remove film and seal with sticker.
- 9 Insert the now empty lower spool in the upper chamber, key slot to the right.





Page

Setting the Exposure Value:

- 17 Ascertain the exposure value from the table on the camera back or from an exposure meter.
- 12 Pull out lever ① and set the exposure value on scale ② (go back over scale if need be).

Diaphragm - Shutter Speed Setting:

- 12 Use lever ①, without pulling, for setting the desired diaphragm-shutter speed combination ③: the speed is always set so that the figure is in the middle of the window.
- 13 The white figures of the scale = automatically timed fractions of a second in descending order, the green figures = full seconds for time exposures by hand.

Focusing:

- 14 Open hood by lifting rear edge ④.
- 14 Raise magnifier by a slight push inwards of panel ⑤.
- 14 Turn focusing knob ⑥ until ground glass shows object with maximum sharpness.

Page

- 19 When required: Check depth of field ⑦ and if necessary refocus.

Check a selected area on the ground glass, straightening the camera in accordance with the grid lines.

- 14 When needed, open the sports frame finder by pushing the panel ⑤ inwards until it catches. Release by slight finger pressure against hood's right panel.

Releasing the shutter

- 15 Swing out shutter release guard ⑧.
- 15 Press release button ⑨ (with Time exposures: hold and release only after desired interval has elapsed. If necessary: lock release with guard).
Secure release.
- 15 For delayed action pictures: Pull knob ⑩ and swing lever to V, release shutter as usual.

For further information, please refer to:

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- 8 Eveready case
- 16 Exposure and Exposure Value
- 17 Exposure Table
- 18 Moving objects and shutter speed
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- 20 Depth-of-field tables
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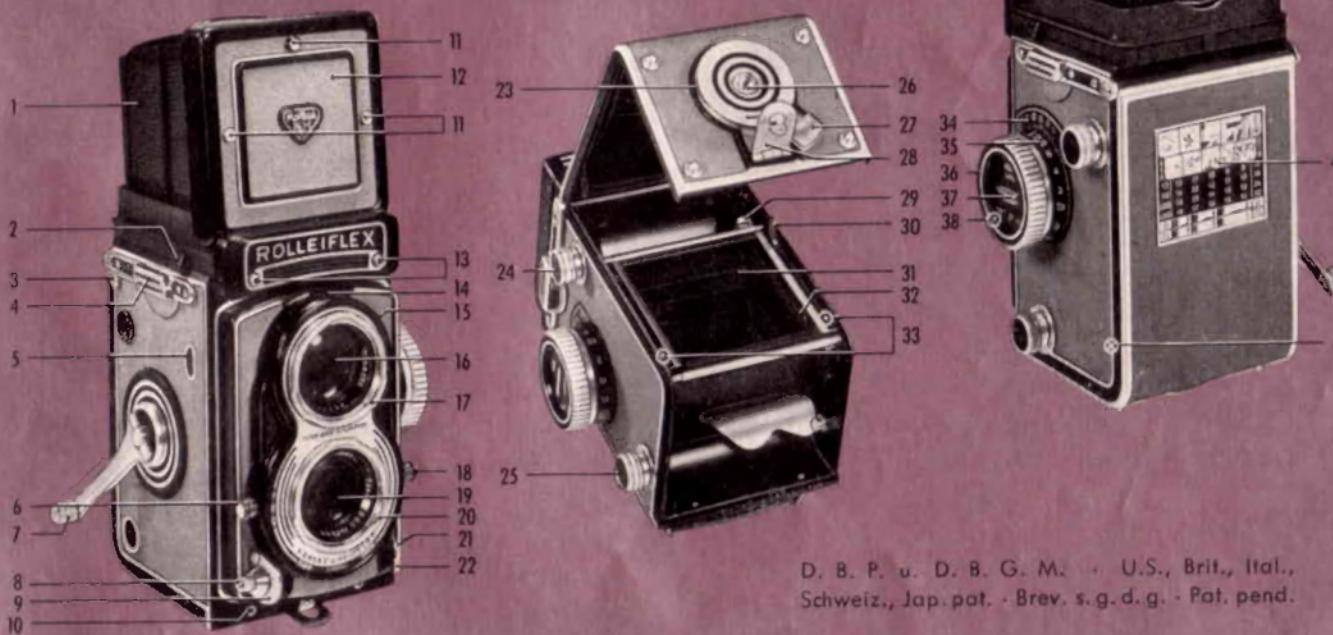
Description of the Camera

1 Hood	➤ 14	21 Flash cable socket	➤ 24
2 Locking device for focusing hood	➤ 29	22 Locking device for flash cord plug	➤ 24
3 Locking clip for back hinge	➤ 28	23 Fastening groove for Rolleiflex tripod attachment	➤ 34
4 Neck-strap holder	➤ 8	24 Take-up spool knob (empty spool)	➤ 9
5 Film frame counter	➤ 10, 11	25 Supply spool knob	➤ 9
6 Synchro lever (X - M), also for tensioning self-timer (V)	➤ 15, 24	26 Tripod socket	➤ 34
7 Film advance and shutter tensioning crank	➤ 10	27 Safety clip for back locking lever	➤ 9
8 Shutter release with cable socket	➤ 15	28 Back locking lever	➤ 9
9 Shutter release guard	➤ 15	29 Spring loaded retaining socket for take-up spool	➤ 28
10 Groove for use with Rolleifix or Panorama Head	➤ 34, 35	30 Automatic setting lever for film counter gear	
11 Pin-socket for direct view finder mask	➤ 29	31 Anti-reflection baffles	
12 Direct view finder flap	➤ 14	32 Automatic switch for 16-exposure operation	➤ 28
13 Retaining screws for photo electric exposure meter	➤ 30	33 Starting marks for 120 (B II 8) roll film	➤ 10
14 Indicator window for shutter speed/diaphragm combinations	➤ 12, 13	34 Depth-of-field scale	➤ 19
15 Exposure Value window	➤ 12, 13	35 Focusing scale	➤ 19
16 Viewing lens Heidosmat 1 : 2.8/75 mm – angle of view 56°	➤ 12	36 Focusing knob	➤ 14
17 Double bayonet mount for Rolleiflash and Rolleinar (Bayonet size I)		37 Adjustment of film reminder dial	➤ 3, 31
18 Setting lever for exposure value-diaphragm-shutter speed		38 Retaining screws for film reminder dial	
19 Taking lens Zeiss Tessar 1 : 3.5/75 mm – angle of view 56°		39 Focusing magnifier (magnification about 2.5 x)	➤ 14, 34
20 Double bayonet mount for lens accessories and lens hood (Bayonet size I)		40 Rear sight for direct view finder	➤ 14

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➤ 9
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➤ 19
➤ 19
➤ 14
➤ 3, 31
➤ 14
➤ 17

Rolleiflex T



D. B. P. u. D. B. G. M. - U.S., Brit., Ital.,
Schweiz., Jap. pat. - Brev. s.g.d.g. - Pat. pend.

Eveready Case



To Open: lift the top from the rear and fold forward and down ①.

Removing the Camera: swing locking lever on either side ② downward. Lift crank outward. Spread the sides of the case slightly and pull camera forward ③.

Inserting the Camera: spread the two sides of the case slightly, guide the raised crank through opening from the inside and lower the camera backwards into the case. Press the

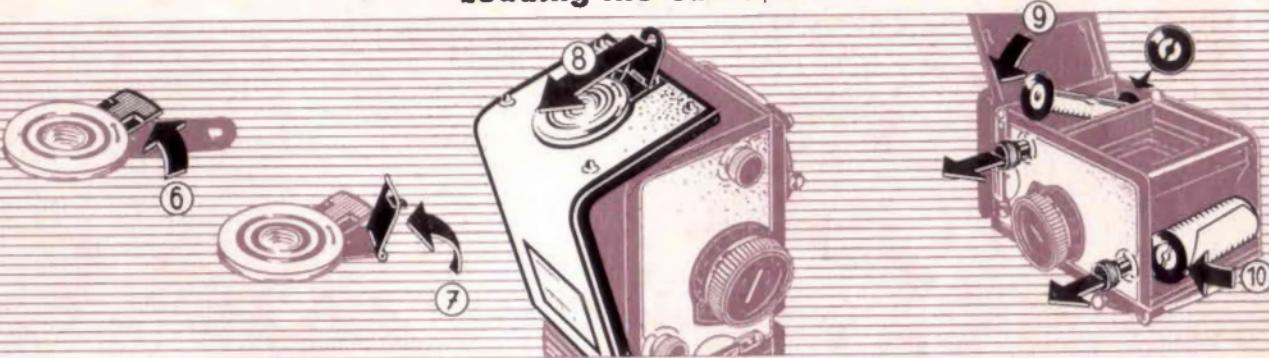
sides together and swing locking levers upward.

Detaching the Front (if required): Press clip ④ downward, remove the front flap. –

To Attach: Insert the front flap in hinge and close eveready case.

Release of Neck Strap: press the retaining prongs together ⑤ and pull strap. – **To Fasten:** Insert the retaining prongs into the strap holders where they snap into position.

Loading the Camera



Changing film should always be done in shade or subdued light, never in direct sunlight!

Opening back: Turn the safety back lock clip ⑥ in direction of arrow, lift back lock lever ⑦ and pull back open ⑧.

Empty spool (upper spool chamber): Will be found inserted in new cameras – otherwise

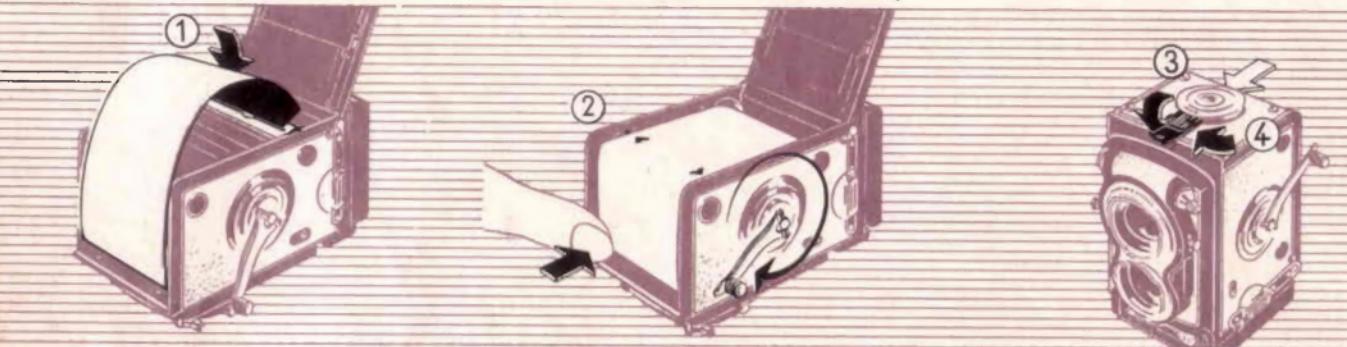
insert as with new film spool, keeping key slot to the right ⑨.

Inserting new film spool (lower chamber): Pull out film spool knob, insert film, right side first ⑩ and allow film knob to return to position.

The tapered leading edge of the film backing paper must point in the direction it will go as the film is run off.

The designations left, right, forward, back, above, below apply to camera in normal operating position. Accordingly: left = focusing side, right = crank side, etc.

(Loading the Camera)



Starting the film. Break the paper seal and pull the film backing paper up to the empty spool; insert the tapered end into the long slot ①. Turn the crank, while braking the full spool with the left hand thumb – wind until the two printed triangular marks (or double arrows) are opposite the red dots at the sides of the film aperture frame ② – Stop!

Close the back by pressing the back with the palm of the hand, fold down the back lock lever ③ and turn back the back lock clip ④.

Winding film to shooting position: Turn crank forward to stop and back again in opposite direction to stop ⑤. Film frame counter indicates No. 1, shutter is cocked.

Setting the film type reminder (►page 3, 30/31).

Winding the film

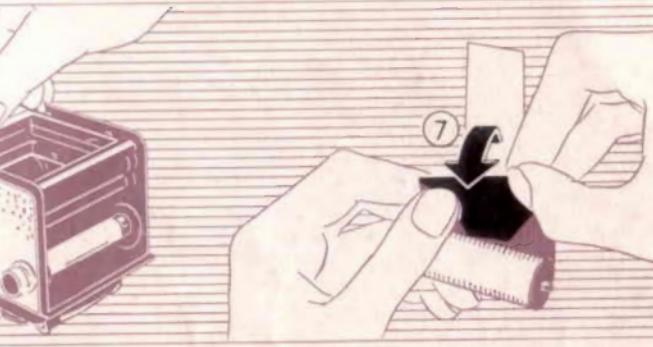


After each shot: Turn crank as before, forward to stopping point, back again to stop ⑤.

Double exposures and blanks are eliminated. Crank will turn only after releasing shutter. A simple rule: turn crank if it can be turned – forward and back to lock. If it is locked camera is ready for shot.

The crank need not be folded down after each shot when shooting in rapid sequence.

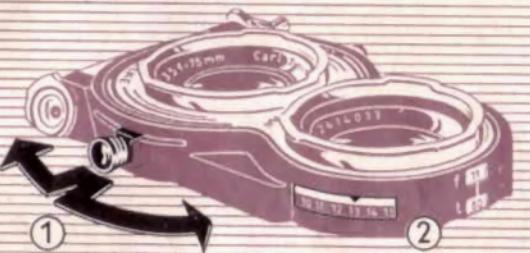
Unloading the Camera



After the last exposure, the terminating mark (◎) will appear in film counter window. The film is finished and the crank is no longer locked.

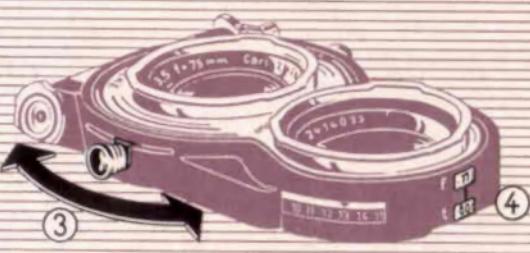
Roll up remaining backing paper with four full revolutions. Open back in subdued light. Pull out upper spool knob and remove film from the left ⑥. Fold backing paper cross-wise ⑦ and fasten down with sticker. Return exposed film to original packing.

Setting Exposure Value and Diaphragm/Shutter Speed



The lever ① acts as an automatic coupling device for diaphragm and shutter speed scales. Pulling lever outward uncouples scales, releasing lever recouples them.

1. **Setting Exposure Value:** Pull the lever, uncoupling the scales, and slide it up or down ① until arrow ② points to desired exposure value. If more movement is needed to bring up the desired value, re-engage scales, slide back, then repeat operation.



2. Setting diaphragm / shutter speed: Move lever ③ until desired diaphragm-shutter speed combination appears in the window ④. Always set so that shutter speed is in middle of indicator window!

3. Special Case: Setting shutter speed and diaphragm stop independently (without regard to exposure value, for example, as in flash shots): First set the speed (if necessary go back over scale), then uncouple and set diaphragm.

Exposure Value

The exposure value provides the basic setting of the camera to the desired exposure (► page 16), automatic coupling keeps exposure constant.

Half exposure values may be used. Setting scale to next lower number doubles exposure.

Duration of Exposure

The Shutter Speed must be chosen to suit the subject movement (► page 18). 1/60th sec. is the speed most commonly used, minimizing camera movement in snapshots.

The white section of the scale denotes fractions of a second, for example $30 = 1/30$ th sec. Intermediate values between clicks can not be used.

The green section of the scale is for time exposures. The numbers indicate full seconds for up to 60 seconds.

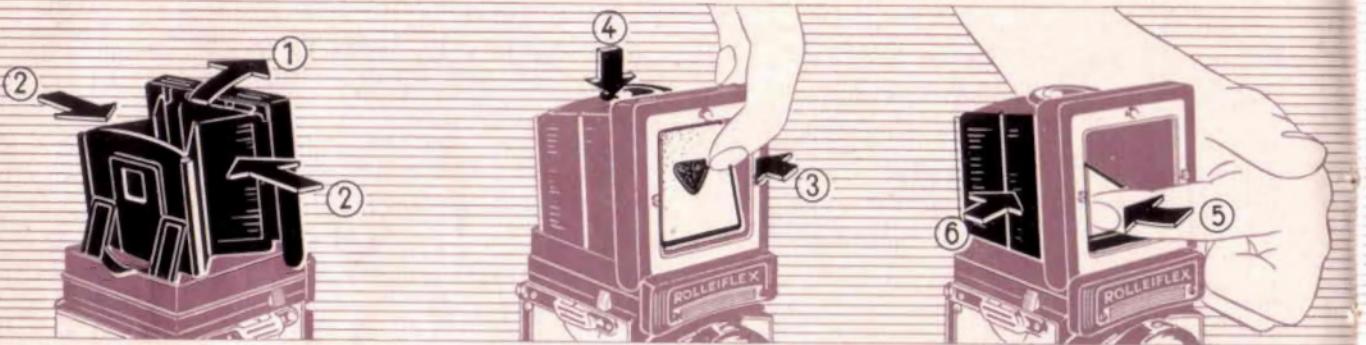


Diaphragm

Stopping down increases depth-of-field (► page 19). Full diaphragm stops (from 4 to 22) as well as half stops (strokes between numbers) may be set. Half diaphragm stops are obtained when working with half exposure values. The f/3.5 diaphragm marking represents a half stop lying between stop 4 and 2.8 of the International Diaphragm Scale.

Closing down the diaphragm to the next full value cuts the effective light passing through exactly in half. To maintain exposure constant would require doubling the time shutter is open - this automatically takes place because of the coupling, exposure value remains the same.

Focusing



Open the hood: Lift back of cover ① and raise to upright position.

To Close: Fold in two sides ②, pull back front.

To Raise Magnifier: Grip upper edge of hood with thumb and forefinger, press panel ③ gently inward.

To Close: Push magnifier support down ④.

General Focusing Rule:

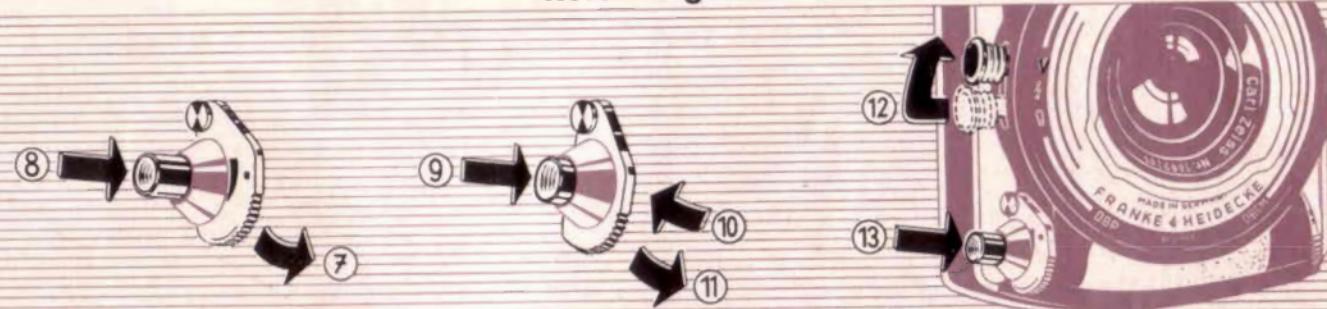
Always keep principle subject in sharpest focus.

To Focus: Turn focusing knob while simultaneously examining ground glass image for sharpness. When needed, use magnifier, holding it close to the eye. Footage numbers on the focusing knob should be used only to ascertain depth-of-field (> page 19).

To Open Sports Finder: Press panel ⑤ all the way, until it catches.

To Close: Tap the right hood wall ⑥ firmly.

Releasing



To Unlock Shutter Release: Swing the safety lever forward ⑦ (red mark visible).

Snapshot Exposure: Press shutter release inward ⑧, selected speed goes off automatically.

Time Exposure: Press release and hold for required time. Shutter will close when you let go.

Long Time Exposures: Press release ⑨ and lock with safety guard ⑩. Terminate exposure by releasing lock ⑪.

Cable Release: Insert in release socket with safety guard locked.

Setting the Self-Timer: after winding film, pull knob ⑫ and set on V.

To Release Self-Timer: Press the shutter release ⑬ – shutter will open after approximately 10 seconds.

Speeds from 1/500th to 1 sec. can be used.
Flash contact – X setting (⌚) – can be used (> page 27).

Shutter and self-timer may be left tensioned even when camera is not in use – spring strength will not deteriorate.

Exposure and Exposure Value

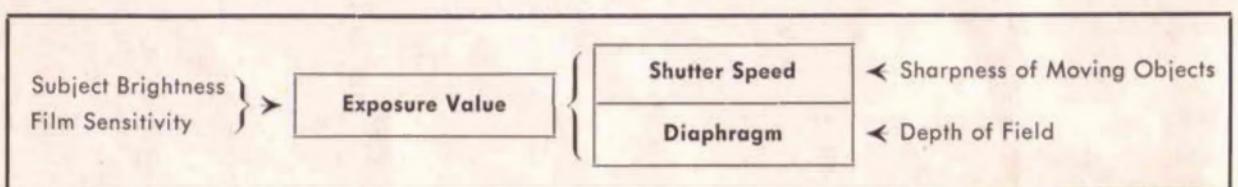
Exposure is adjusted in accordance with the prevailing illumination (more exactly: according to the brilliance of the light reflected by the subject) and the sensitivity of the film. The exposure value – formerly called the light value – serves as the measure of the correct exposure.

The exposure value regulates the correct combination of diaphragm and shutter speed within the permissible working range. The automatic coupling insures these settings and makes possible joint or simultaneous settings of both diaphragm and shutter. The practical advantage obtained is that one is immediately able to change from one speed or diaphragm stop to another, whether for motion stopping purposes or for depth-of-field differences, without bothering to

recalculate and without danger of changing the basic exposure.

The exposure value for the given light condition and the sensitivity of the film in use is read off from the exposure table (> page 17) or from the exposure meter (> page 30) and then set on the scale of the camera (> page 12). The table covers general light conditions and eliminates gross errors in exposure. Exact results however, especially in critical cases, can only be achieved with an electric exposure meter.

When using filters, exposure is extended according to the type and density of the filter. Accordingly minus values are supplied with the filters to be used for correcting the exposure values. The originally chosen exposure value is decreased by this correction value.



The Exposure Table

Subject brightness is easily judged and classified by means of the five standard lighting conditions represented by two illustrations.

Film speed is indicated at the left by ASA figures and at the right by DIN values (> table page 33).

Exposure value is found where brightness and film speed columns cross.

Exposure value adjustment, due to overcast sky or when sun is lower in the sky, is made by use of lower scale. Upper scale: full sunshine – lower scale: overcast sky. The length and intensity of your own body's shadow will give some idea of light conditions. The ability to estimate and choose the correct exposure values for various lighting conditions and time of day will soon come when you begin working on sunny and cloudy days.

Example: Color film 100 ASA (21° DIN), landscape with foreground, sunny noontime (shadows short, no light value adjustment): light value 13. Available diaphragm-speed combinations: 1/500-f:4, 1/250-f:5.6, etc. Same subject in the afternoon, longer shadows, would require adjusted value, perhaps $13 - 1 = 12$.

	A	B	C	D	E	
ASA						DIN
12	12	11	10	9	8	12
50	14	13	12	11	10	18
200	16	15	14	13	12	24
400	18	17	16	15	14	30

Explanations of the Picture Examples:

A: High mountains (snow) without foreground. Open beach. – B: Sport scenes. Bright streets and squares, open landscapes. – C: Landscapes with foreground. Groups in open air. – D: Groups in shade. Street scenes with shade. – E: Groups under trees, lightly shaded. Groups in glassroofed halls.

Speed of Moving Subjects and Shutter Speeds

Example	Miles per hour approximately							Distance (yards)
	3 mph	6 mph	12 mph	30 mph	60 mph	120 mph		
Pedestrians								
Runners Moving air								
Dicycles Windy								
Light Athletics Stormy Surf								
Automobiles Railway Trains Racing								
Motor Racing								
	40	$\frac{1}{30}$	$\frac{1}{60}$	$\frac{1}{30}$	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{60}$	Distance (yards)
	15	$\frac{1}{30}$	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{250}$	25
	8	$\frac{1}{60}$	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{500}$	12
	4	$\frac{1}{125}$	$\frac{1}{250}$	$\frac{1}{500}$	$\frac{1}{250}$	$\frac{1}{500}$		6

Moving Objects require short shutter speeds in order to be reproduced sharply. For this purpose the table contains computed minimum values, depending on the factors: speed, distance and direction.

Taking distance: the yard column on the left stands for sufficient sharpness (f/1400), the yard column on the right for increased sharpness (f/2000). In spite

of these normally correct figures, it is often possible in actual photography to use longer shutter speeds. This is because the eye interprets slight unsharpness as giving an added impression of speed.

Long arrow = direction of movement.

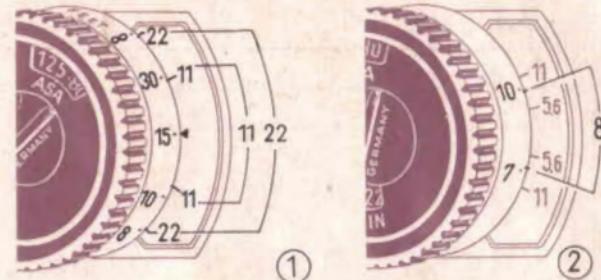
A short arrow = taking direction (\rightarrow up to 10° , \nearrow up to 30° and \nwarrow up to 90° to the direction of movement).

Depth of Field Indicator

Both before and behind the plane of sharp focus there is always a relatively sharp zone. The width or depth of this zone can be artfully increased. It increases in depth when either closing down the lens or moving back from the object on which you have focused. Therefore it is evident that if the subject requires an extended depth of field, it is necessary to change the diaphragm-shutter speed combination to one with a smaller stop or to move back with the camera.

The **Depth of Field Indicator** consists of the special diaphragm scale located next to the distance scale and the distance scale itself. Two stroke marks outline the zone covered by each diaphragm opening. The marks are located on either side of the distance indicator ∇ , showing "before" and "behind" focus. The unnumbered diaphragm marks represent the stops 4, 8 and 16, respectively.

To Use: To find the limits of the depth of field, both before and behind the principal plane of focus, after focusing and after choosing the diaphragm opening. The beginning and end of the depth of field is read off on the distance scale. The sharp area lies between the distances bracketed by the marks extending from the diaphragm opening figure.



1. **Example:** focusing to 15 ft with diaphragm opening 11 gives a depth of field from 10 ft to 30 ft approx., focusing to 15 ft with diaphragm opening f : 22 gives on the other hand a depth of field from 8 ft to ∞ approx. (Stopping down improves the depth of field.) Considerable stopping down necessitates greatly increased exposure time. To obtain depth of field with the largest possible diaphragm opening, a different method of focusing must be employed:

2. **Example:** the subject requires sharpness from 7 ft to 10 ft. (Other distances, if unknown, can be read directly off the scale after focusing separately to the limits required). Procedure: the focusing knob is turned until both footage values are located opposite identical diaphragm openings, and in this way the most favourable diaphragm opening is obtained, in this case f : 8 (page 34).